

# SRS



## Caged Ball LM Guides

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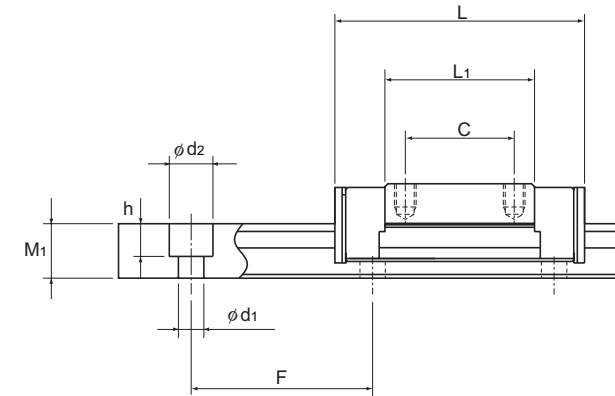
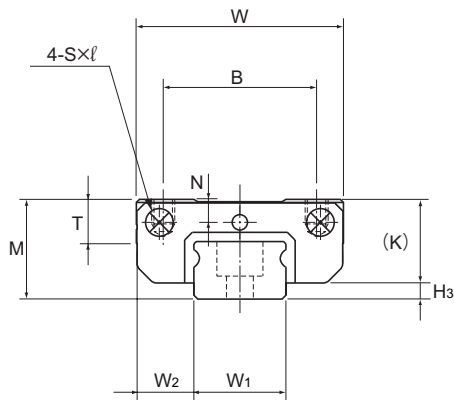
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#### Technical Descriptions

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\* Please see the separate "A Technical Descriptions of the Products".

# Model SRS-M



Unit: mm

Model No.	Outer dimensions			LM block dimensions								LM rail dimensions					Basic load rating		Static permissible moment N-m*					Mass		
	Height	Width	Length	B	C	S×ℓ	L <sub>1</sub>	T	K	N	H <sub>3</sub>	Width	Height	Pitch	Length*	C	C <sub>0</sub>	M <sub>A</sub>		M <sub>B</sub>		M <sub>C</sub>	LM block	LM rail		
	M	W	L															W <sub>1</sub>	W <sub>2</sub>	M <sub>1</sub>	F	d <sub>1</sub> ×d <sub>2</sub> ×h			Max	kN
SRS 7M	8	17	23.4	12	8	M2×2.3	13.4	3.3	6.7	1.6	1.3	7 <sup>0</sup> <sub>-0.02</sub>	5	4.7	15	2.4×4.2×2.3	300	1.51	1.29	3.09	—	3.69	—	5.02	0.009	0.25
SRS 9M	10	20	30.8	15	10	M3×2.8	19.8	4.9	9.1	2.4	0.9	9 <sup>0</sup> <sub>-0.02</sub>	5.5	5.5	20	3.5×6×3.3	1000	2.69	2.31	7.82	43.9	9.03	50.8	10.6	0.016	0.32
SRS 12M	13	27	34.4	20	15	M3×3.2	20.6	5.7	11	3	2	12 <sup>0</sup> <sub>-0.02</sub>	7.5	7.5	25	3.5×6×4.5	1340	4	3.53	12	78.5	12	78.5	23.1	0.027	0.65
SRS 15M	16	32	43	25	20	M3×3.5	25.7	6.5	13.3	3	2.7	15 <sup>0</sup> <sub>-0.02</sub>	8.5	9.5	40	3.5×6×4.5	1430	6.66	5.7	26.2	154	26.2	154	40.4	0.047	0.96
SRS 20M	20	40	50	30	25	M4×6	34	9	16.6	4	3.4	20 <sup>0</sup> <sub>-0.03</sub>	10	11	60	6×9.5×8	1800	7.75	9.77	54.3	296	62.4	341	104	0.11	1.68
SRS 25M	25	48	77	35	35	M6×7	56	11	20	5	5	23 <sup>0</sup> <sub>-0.03</sub>	12.5	15	60	7×11×9	1800	16.5	20.2	177	932	177	932	248	0.24	2.6

Note) Since stainless steel is used in the LM block, LM rail and balls, these models are highly resistant to corrosion and environment.

Note) If a grease nipple is required, indicate "with grease nipple". (available for models SRS 15M/15WM/20M/25M)

If a greasing hole is required, indicate "with greasing hole". (available for models SRS 7M/7WM/9M/9WM/12M/12WM). The maximum length under "Length\*" indicates the standard maximum length of an LM rail. (See B-54.)

Static Permissible Moment\*

1 block: static permissible moment value with 1 LM block  
Double blocks: static permissible moment value with 2 blocks closely contacting with each other

SRS-G Basic Load Ratings

Model No.	Basic load rating	
	C	C <sub>0</sub>
SRS 9GM	2.07	2.32
SRS 12GM	3.36	3.55
SRS 15GM	5.59	5.72
SRS 20GM	5.95	9.40
SRS 25GM	13.3	22.3

## Model number coding

**2 SRS20M QZ UU C1 +220L P M - II**

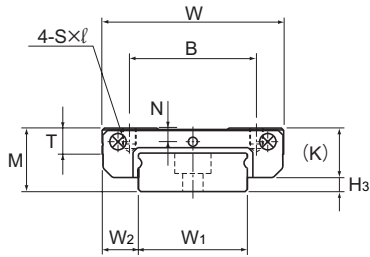
2: No. of LM blocks used on the same rail  
 SRS20M: Model number  
 QZ: With QZ Lubricator  
 UU: Contamination protection accessory symbol (\*1)  
 C1: Radial clearance symbol (\*2)  
 +220L: LM rail length (in mm)  
 P: Stainless steel LM rail  
 M: Accuracy symbol (\*3)  
 - II: Symbol for No. of rails used on the same plane (\*4)

(\*1) See contamination protection accessory on A-368. (\*2) See A-113. (\*3) See A-126. (\*4) See A-59.

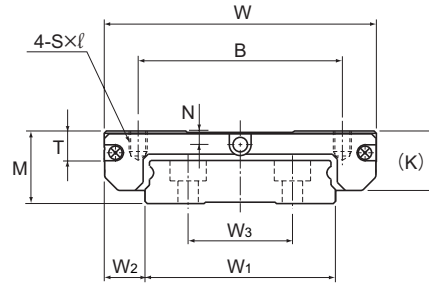
Note) This model number indicates that a single-rail unit constitutes one set. (i.e., required number of sets when 2 rails are used in parallel is 2 at a minimum.)

Those models equipped with QZ Lubricator cannot have a grease nipple.

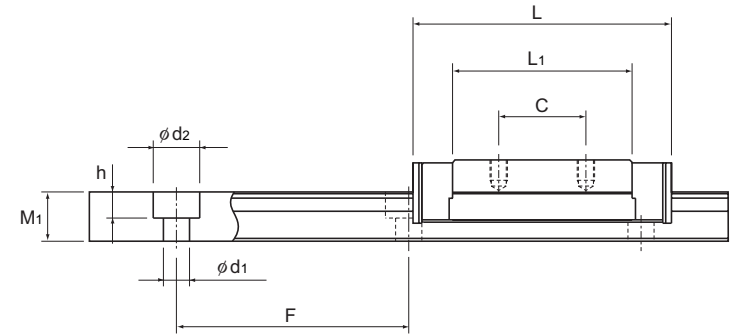
# Model SRS-WM



Models SRS7WM, 9WM and 12WM



Model SRS15WM



Unit: mm

Model No.	Outer dimensions			LM block dimensions								H <sub>3</sub>	LM rail dimensions						Basic load rating		Static permissible moment N-m*					Mass	
	Height	Width	Length	B	C	S×ℓ	L <sub>1</sub>	T	K	N	Width		W <sub>2</sub>	W <sub>3</sub>	Height	Pitch	Length*	C	C <sub>0</sub>	M <sub>A</sub>		M <sub>B</sub>		M <sub>C</sub>	LM block	LM rail	
	M	W	L								W <sub>1</sub>				M <sub>1</sub>	F	d <sub>1</sub> ×d <sub>2</sub> ×h	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg	kg/m
SRS 7WM	9	25	31	19	10	M3×2.8	20.4	3.8	7.2	1.8	14 <sup>0</sup> <sub>-0.02</sub>	5.5	—	5.2	30	3.5×6×3.2	400	2.01	1.94	6.47	—	7.71	—	14.33	0.018	0.56	
SRS 9WM	12	30	39	21	12	M3×2.8	27	4.9	9.1	2.3	18 <sup>0</sup> <sub>-0.02</sub>	6	—	7.5	30	3.5×6×4.5	1000	3.29	3.34	14	78.6	16.2	91	31.5	0.031	1.01	
SRS 12WM	14	40	44.5	28	15	M3×3.5	30.9	5.7	11	3	24 <sup>0</sup> <sub>-0.02</sub>	8	—	8.5	40	4.5×8×4.5	1430	5.48	5.3	26.4	143	26.4	143	66.5	0.055	1.52	
SRS 15WM	16	60	55.5	45	20	M4×4.5	38.9	6.5	13.3	3	42 <sup>0</sup> <sub>-0.02</sub>	9	23	9.5	40	4.5×8×4.5	1800	9.12	8.55	51.2	290	51.2	290	176	0.13	2.87	

Note) Since stainless steel is used in the LM block, LM rail and balls, these models are highly resistant to corrosion and environment.

Note) If a grease nipple is required, indicate "with grease nipple". (available for models SRS 15M/15WM/20M/25M)

If a greasing hole is required, indicate "with greasing hole". (available for models SRS 7M/7WM/9M/9WM/12M/12WM). The maximum length under "Length\*" indicates the standard maximum length of an LM rail. (See B-54.)  
 Static Permissible Moment\*  
 1 block: static permissible moment value with 1 LM block  
 Double blocks: static permissible moment value with 2 blocks closely contacting with each other

SRS-G Basic Load Ratings

Model No.	Basic load rating	
	C kN	C <sub>0</sub> kN
SRS 9WGM	2.67	3.35
SRS 12WGM	4.46	5.32
SRS 15WGM	7.43	8.59

### Model number coding

**2 SRS15WM QZ UU C1 +550L P M -II**

- 2**: No. of LM blocks used on the same rail
- SRS15WM**: Model number
- QZ**: With QZ Lubricator
- UU**: Contamination protection accessory symbol (\*1)
- C1**: Radial clearance symbol (\*2)  
Normal (No symbol)  
Light preload (C1)  
Medium preload (C0)
- +550L**: LM rail length (in mm)
- P**: Accuracy symbol (\*3)  
Normal grade (No Symbol)/High accuracy grade (H)  
Precision grade (P)/Super precision grade (SP)  
Ultra precision grade (UP)
- M**: Stainless steel LM rail
- II**: Symbol for No. of rails used on the same plane (\*4)

(\*1) See contamination protection accessory on A-368. (\*2) See A-113. (\*3) See A-126. (\*4) See A-59.

Note) This model number indicates that a single-rail unit constitutes one set. (i.e., required number of sets when 2 rails are used in parallel is 2 at a minimum.)  
 Those models equipped with QZ Lubricator cannot have a grease nipple.

## Standard Length and Maximum Length of the LM Rail

Table1 shows the standard lengths and the maximum lengths of model SRS variations. If the maximum length of the desired LM rail exceeds them, jointed rails will be used. Contact THK for details. For the G dimension when a special length is required, we recommend selecting the corresponding G value from the table. The longer the G dimension is, the less stable the G area may become after installation, thus causing an adverse impact to accuracy.

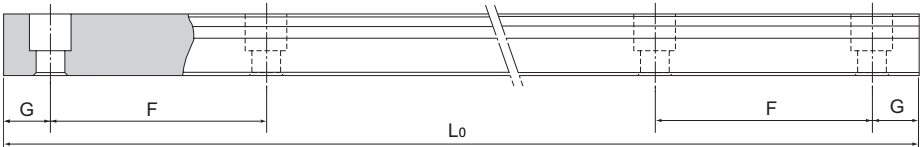


Table1 Standard Length and Maximum Length of the LM Rail for Model SRS

Unit: mm

Model No.	SRS 7M	SRS 7WM	SRS 9M	SRS 9WM	SRS 12M	SRS 12WM	SRS 15M	SRS 15WM	SRS 20M	SRS 25M
LM rail standard length (L <sub>0</sub> )	40	50	55	50	70	70	70	110	220	220
	55	80	75	80	95	110	110	150	280	280
	70	110	95	110	120	150	150	190	340	340
	85	140	115	140	145	190	190	230	460	460
	100	170	135	170	170	230	230	270	640	640
	115	200	155	200	195	270	270	310	880	880
	130	260	175	260	220	310	310	430	1000	1000
		290	195	290	245	390	350	550		
			275	320	270	470	390	670		
			375		320	550	430	790		
					370		470			
					470		550			
					570		670			
						870				
Standard pitch F	15	30	20	30	25	40	40	40	60	60
G	5	10	7.5	10	10	15	15	15	20	20
Max length	300	400	1000	1000	1340	1430	1430	1800	1800	1800

Note1) The maximum length varies with accuracy grades. Contact THK for details.

Note2) If jointed rails are not allowed and a greater length than the maximum values above is required, contact THK.